

October 31, 2006

## **October 2006 Ambient Air Quality Monitoring Guidelines**

The Bureau of Air Quality Planning's ambient air quality and meteorological monitoring guideline document has been revised from the June 2003 version. Some air quality permits require ambient air quality and (or) meteorological monitoring to be conducted as a permit condition. Those air quality permits reference the version of the Bureau of Air Quality Planning's Ambient Air Quality Monitoring Guidelines in effect at the time of the issuance of the permit, stating that monitoring must be conducted in accordance with that version of the Guidelines. The Bureau Guidelines have now been revised in major part to accommodate changes in US EPA modeling requirements. These revisions result in the need to install additional equipment on meteorological towers collecting data for new permitting purposes. No additional equipment installation is required to establish compliance with air quality permits which reference a previous (June 2003 or older) version of the Guidelines.

The Bureau has revised the Guidelines primarily in response to the US EPA's promulgation in the Federal Register on November 9, 2005 of its changes and additions to its *Guideline on Air Quality Models*—more specifically, EPA's recommendation to replace the Industrial Source Complex (ISCST3) dispersion model with the dispersion model AERMOD no later than November 9, 2006. AERMOD model meteorological inputs include two new parameters to be collected at meteorological towers, solar radiation and temperature difference, in support of AERMOD's use of the Bulk Richardson scheme. Public notice of changes to the federal Appendix W Guideline was provided at the federal and state levels through the Federal Register announcement and the related amendment of the applicable Nevada Administrative Code. The ISCST3 model is no longer contained in the federal Guideline.

After November 9, 2006 proposed and existing sources submitting air quality modeling analyses in support of new air quality permits, permit renewals or permit modifications may be required to provide appropriate meteorological input data for use in AERMOD modeling analyses. Existing sources already conducting meteorological monitoring for ISCST3 (sigma theta) modeling analyses, which did not convert to AERMOD (SRDT) meteorological monitoring, will have one year, until November 9, 2007, during which five years of representative National Weather Service (NWS) data may be substituted for one year of on-site meteorological data for use in AERMOD. The appropriate NWS station may not always be the closest one to the project site, and the selection of a NWS station for such AERMOD modeling data substitution is subject to Bureau approval.

The Bureau's ambient monitoring guidelines have also been revised to help facilities identify and correct certain deficiencies which may invalidate or compromise the monitoring data collected. The new version of the Guidelines will be referenced in future air quality permits which contain ambient monitoring conditions. The Bureau's Guidelines must also be adhered to when necessary to support Air Quality Permits To Construct, Air Quality Operating Permits, permit renewals and permit modifications. What constitutes valid ambient monitoring is defined by the Bureau's Guidelines in conjunction with the various US EPA guidance documents referenced in the Bureau Guidelines.

The draft revised Guidelines were presented for comments at a Stakeholders' Meeting on

October 18, 2006. Those comments were addressed in the final Guidelines. The final October 2006 Guidelines may be viewed on the Bureau of Air Quality Planning's website at <http://ndep.nv.gov/baqp/monguide.html>. Copies are also available from the Bureau upon request to (775) 687-9354.